

2021 Utah Seat Belt Use Survey

Since 1986, the Utah Department of Public Safety's Highway Safety Office has conducted an annual seat belt observational study to determine the percentage of motorists who buckle up. This study has been the cornerstone for developing, implementing and evaluating occupant protection programs in the state. *The first study revealed that only 18% of Utah motorists use seat belts. For over three decades, safety advocates have worked to increase the use of this life-saving device by implementing a multi-faceted and comprehensive program. As a result, seat belt use has climbed and lives have been saved.*

EXECUTIVE SUMMARY & RESULTS

The National Highway Traffic Safety Administration (NHTSA) requires state's to conduct observational surveys annually to determine the level of seat belt use. The 17 counties selected for observation in Utah were: Box Elder, Cache, Carbon, Davis, Grand, Iron, Millard, Salt Lake, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Utah, Washington, and Weber.

The study was conducted June 7-19, and August 24-25 during which a total of 31,026 vehicle occupants, including 25,397 drivers and 5,629 outboard passengers, were observed. Of the 25,397 vehicles, twenty-eight (28%) were cars, 38% sport utility vehicles (SUV), 26% trucks, and 8% were vans.

The seat belt use rate among motor vehicle occupants was **88.2% in 2021**, which demonstrates a decrease of 2% from the 2019 rate of 90.2%. Surveys were not conducted in 2020 due to the COVID-19 pandemic. This marks the first decrease in seat belt use since the implementation of the primary seat belt law in May 2015.

Usage rates by type of vehicle were analyzed. Eighty-eight (88%) of car occupants were belted, 91% for SUVs, 92% for vans, and 82% of truck occupants were using seat belts. Truck occupants had the lowest seat belt usage rate

at 82%, while vans had the highest usage rate at 92%. Data showed that drivers buckle up less often than passengers. Seat belt use for drivers was 87.7% and 90.9% for outboard passengers.

Urban counties (Cache, Davis, Salt Lake, Utah, Washington, and Weber) were analyzed separately from rural. The seat belt usage rate for urban areas was 89.1%, while rural counties rate was 85.3% (a 3.7% decrease from 2019). Table 2 shows that usage rates were higher in urban counties in all categories with the exception of vans.

The study found that female occupants buckled up more often (90.9%) than their male counterparts (86%) and this is true for both urban and rural areas. In urban counties, the use rate among females was found to be 91.2%, whereas the rate among males was 87.5%. In rural counties 90.1% of females were using seat belts but only 81.9% of males buckled up (Table 2).

According to federal guidelines, the reliability of the survey results should be within the 95 percent confidence interval. The standard error was determined to be 0.56%, well within a standard error of 2.5 percent as required by NHTSA guidelines.

Table 1: Seat Belt Use (%) by Vehicle Type in Utah, 2018, 2019, 2021

	2021	2019	2018
All Vehicles	88.2	90.2	89.0
SUVs	91.2	93.0	91.6
Vans	92.0	92.0	93.4
Cars	88.3	92.0	90.3
Trucks	81.6	83.0	81.6

Table 2: Seat Belt Use (%) by Urban/Rural in Utah, 2021

	Urban	Rural
All Occupants	89.1	85.3
Male Occupants	87.5	81.9
Female Occupants	91.2	90.1
SUVs	91.6	90.0
Vans	91.8	92.7
Cars	89.0	85.7
Trucks	83.6	77.4

BACKGROUND

In April 2011, NHTSA issued new Uniform Criteria for State Observational Surveys of Seatbelt Use. Utah's new survey design was accepted as fully compliant with the Uniform Criteria and was used for the implementation of the state's seat belt surveys beginning in 2012. The most dramatic change in the survey design was the inclusion of 11 rural counties in the study. Prior to 2012, the study only surveyed the six most urban counties in the state. Due to the changes in methodology, the results should not be compared to previous statewide seat belt use surveys and marks a new benchmark for the state.

**Utah's
Seat Belt Use Rate
in 2021 was 88.2%**

REGIONAL DIFFERENCES & CONCLUSIONS

Survey results reflect restraint use by the driver and front seat outboard passenger in a probability sample of vehicles drawn from the counties with the greatest motor vehicle fatality rates in Utah. The seat belt usage rates for occupants are very different from county to county, especially when comparing urban and rural areas of the state.

Table 3 presents the seat belt usage rates by county and gender for 2021. With the exception of Grand, Iron, Millard, and Washington counties, there was a consistent decrease in both urban and rural counties. Grand County saw the largest increase (2.1%) while Carbon County saw the biggest decrease (-22.8%). The rates of female seat belt usage exceeded that of males in all counties, except Weber. The greatest increase was seen for females on Iron County, and the biggest decrease was seen for males in Carbon County.

CONCLUSIONS

A significant change took place on May 12, 2015 with the implementation of a primary seat belt law in Utah. The observed usage rates increased 8.2% from before the primary seat belt law to 2019. With the other variables being equal from year to year, the logical conclusion would be that the implementation of Utah's primary seat belt law was responsible for the increase in usage of seat belts. Although rates of seat belt use decreased from 2019 to 2021, the rates are still higher than they were in 2015 (+1.0%).

Despite the drop in seat belt usage statewide in 2021, several relationships have remained the same. Urban counties as a whole having a seat belt usage rate 3.8% higher than rural counties. The urban—rural relationship held for all vehicle types in 2021 with the exception of vans, which had a slightly higher seat belt usage rate in rural counties. Females continue to use seat belts at a higher rate than males, with an overall difference of nearly 5%. SUVs had nearly 10% higher seat belt usage compared to trucks. Trucks occupants continue to have the lowest seat belt usage rate.

Table 3: Seat Belt Use by County and Gender in 2021, Utah
(including 2019 use rate by county and % point change)

County	2021			2019	
	% Female Belted	% Male Belted	% Total Belted	% Total Belted	% Point Change
Box Elder	91.0	87.9	89.2	90.6	-1.4
Cache	90.2	87.1	88.6	91.6	-3.0
Carbon	81.0	65.4	72.0	94.8	-22.8
Davis	87.5	86.7	87.1	94.2	-7.1
Grand	92.9	88.4	90.3	88.2	+2.1
Iron	95.6	77.3	84.6	84.1	+0.5
Millard	97.3	92.0	94.4	93.2	+1.2
Salt Lake	92.2	87.5	89.4	90.9	-1.5
San Juan	81.8	72.6	76.6	81.7	-5.1
Sanpete	82.5	68.1	75.0	81.8	-6.8
Sevier	84.9	76.0	79.8	81.7	-1.9
Summit	94.1	85.3	89.1	91.5	-2.4
Tooele	87.8	84.9	85.9	91.5	-5.6
Uintah	81.7	71.8	76.1	78.2	-2.1
Utah	91.4	86.3	88.7	88.8	-0.1
Washington	93.6	87.3	90.2	89.8	+0.4
Weber	90.0	91.4	90.8	91.2	-0.4
Total	90.9	86.0	88.2	90.2	-2.0

SURVEY DESIGN AND METHODOLOGY

According to survey criteria, each state must study seat belt use within a geographic area that accounts for at least 85 percent of the passenger vehicle crash-related fatalities according to the Fatality Analysis Reporting System (FARS) data averages for the period of 2008 to 2010. Of Utah's 29 counties, 17 were selected to be included in this study. Road segments by functional classification (Interstate/Primary, Arterial/Secondary, and Local) were randomly selected using a combination of the Utah Department of Transportation roadway file and the 2010 TIGER data developed by the U.S. Census Bureau. All passenger vehicles with a gross vehicle weight up to 10,000 pounds were included in the survey. A total of 170 sites were selected for the study, which took place for a two-week period in June and August 2021. In each of the 17 counties, 10 sites were surveyed by trained observers who documented belt use and gender among the driver and outboard front seat passenger for a period of 45 minutes at each



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 For a copy of the complete survey design and methodology contact the Highway Safety Office

